Statement of Basis of the Federal Operating Permit

BASF Corporation

Site Name: BASF Freeport Site
Area Name: OXO/Syngas Alcohols Complex
Physical Location: 602 Copper Rd
Nearest City: Freeport
County: Brazoria

Permit Number: O1928
Project Type: Renewal

The North American Industry Classification System (NAICS) Code: 325199
NAICS Name: All Other Basic Organic Chemical Manufacturing

This Statement of Basis sets forth the legal and factual basis for the draft permit conditions in accordance with 30 TAC §122.201(a)(4). Per 30 TAC §§ 122.241 and 243, the permit holder has submitted an application under § 122.134 for permit renewal. This document may include the following information:

A description of the facility/area process description;
A basis for applying permit shields;
A list of the federal regulatory applicability determinations;
A table listing the determination of applicable requirements;
A list of the New Source Review Requirements;
The rationale for periodic monitoring methods selected;
The rationale for compliance assurance methods selected;
A compliance status; and
A list of available unit attribute forms.

Prepared on: July 12, 2019

Operating Permit
Basis of Determination

Permit Area Process Description
The synthesis gas (syngas) portion of the plant produces and purifies a stream composed of H_2, CO, and CO_2 from raw feeds of $CH_4$and H_2O. These raw feeds are reacted in the reformer in the presence of heat, pressure, and catalyst to form syngas. The CO_2 is removed from the syngas with an amine system and is normally recycled to the reformer feed to shift the reaction. The H_2 is separated from other components using a pressure swing adsorption unit (PSA) which generates a pure H_2 stream to be used throughout the plant and transferred to other processes. A mix of CO and H_2 from the PSA unit is used as a feed to the aldehyde hydroformylation reactor in the 100 system.
The 100 system produces normal and isobutyraldehydes from a feed of C_3H_6, CO, and H_2. The reaction takes place in R-100 in the presence of a catalyst. The 200 system separates these butyraldehydes into pure iso and normal streams. The pure isobutyraldehyde is transferred to another process or hydrogenated into isobutanol in the 500 system. The pure normal butyraldehyde is either hydrogenated into normal butanol in the 400 system or sent to the 300 system where it is reacted over NaOH as a catalyst to make 2-ethylhexenal which is then hydrogenated into 2-ethylhexanol.

FOPs at Site

The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: O1536, O1925, O1926, O1927, O2158, O2907, O3826

Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, SO_2, PM, NOx, HAPs, CO

Reading State of Texas' Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as "applicable requirements") that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
    - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
    - Additional Monitoring Requirements
    - New Source Review Authorization Requirements
    - Compliance Requirements
    - Protection of Stratosphere Ozone
    - Permit Location
    - Permit Shield (30 TAC § 122.148)

- Attachments
    - Applicable Requirements Summary
        - Unit Summary
        - Applicable Requirements Summary
    - Additional Monitoring Requirements
    - Permit Shield
    - New Source Review Authorization References
    - Compliance Plan
    - Alternative Requirements
- Appendix A
    - Acronym list

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the “index number,” detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain

applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3 for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are

burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

Stationary Vents subject to 30 TAC Chapter 111 not addressed in the Special Terms and Conditions

All other stationary vents subject to 30 TAC Chapter 111 not covered in the Special Terms and Conditions are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents are listed in the Determination of Applicable Requirements table.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	Yes
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CSAPR (Cross-State Air Pollution Rule)	No
Federal Implementation Plan for Regional Haze (Texas SO_2 Trading Program)	No

Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html.

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at www.tceq.texas.gov/permitting/air/nav/air_supportsys.html. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*
5-1-D161	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is less than or equal to 1,000 gallons
5-1-D161	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
5-2-D111	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons Control Device Type = Direct-flame incinerator
5-2-D111	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
5-2-D122	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Storage Capacity = Capacity is greater than 40,000 gallons Control Device Type = Direct-flame incinerator
5-2-D122	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = CVS and control device other than a flare (fixed roof)
5-2-D124	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia

Unit ID	Regulation	Index Number	Basis of Determination*
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
5-2-D124	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
5-2-D155	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
5-2-D155	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia
5-2-D158	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is less than or equal to 1,000 gallons
5-2-D158	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
5-2-D202	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons Control Device Type = Direct-flame incinerator
5-2-D202	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)

Unit ID	Regulation	Index Number	Basis of Determination*
5-2-D204	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Storage Capacity = Capacity is greater than 40,000 gallons Control Device Type = Direct-flame incinerator
5-2-D204	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = CVS and control device other than a flare (fixed roof)
5-2-D208	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Storage Capacity = Capacity is greater than 40,000 gallons Control Device Type = Direct-flame incinerator
5-2-D208	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = CVS and control device other than a flare (fixed roof)
5-2-D209	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Storage Capacity = Capacity is greater than 40,000 gallons Control Device Type = Direct-flame incinerator
5-2-D209	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = CVS and control device other than a flare (fixed roof)

Unit ID	Regulation	Index Number	Basis of Determination*
5-3-D302	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
5-3-D302	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)
5-3-D303	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
5-3-D303	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)
5-3-D308	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is less than or equal to 1,000 gallons
5-3-D308	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
5-3-D309	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a submerged fill pipe Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons
5-3-D309	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia

Unit ID	Regulation	Index Number	Basis of Determination*
5-3-D325	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a submerged fill pipe Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
5-3-D325	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)
5-3-D326A	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a submerged fill pipe Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons
5-3-D326A	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
5-3-D326B	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a submerged fill pipe Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons
5-3-D326B	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
5-3-D399	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a submerged fill pipe Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons

Unit ID	Regulation	Index Number	Basis of Determination*
5-3-D399	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)
5-4-D409A	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons
5-4-D409A	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
5-4-D422	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
5-4-D422	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
5-4-D425	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons
5-4-D425	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
5-4-D426A	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a submerged fill pipe Product Stored = VOC other than crude oil or condensate

Unit ID	Regulation	Index Number	Basis of Determination*
			True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons
5-4-D426A	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
5-4-D426B	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a submerged fill pipe Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons
5-4-D426B	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
5-4-D426C	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons
5-4-D426C	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
5-4-D491	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons Control Device Type = Direct-flame incinerator
5-4-D491	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)

Unit ID	Regulation	Index Number	Basis of Determination*
5-4-D499	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons
5-4-D499	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia
5-5-D509A	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons
5-5-D509A	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia
5-5-D525	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
5-5-D525	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)
5-5-D526	30 TAC Chapter 115, Storage of VOCs	115B-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons

Unit ID	Regulation	Index Number	Basis of Determination*
5-5-D526	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
5-4-2EHOLL	30 TAC Chapter 115, Loading and Unloading of VOC	115C-1	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure less than 0.5 psia.
5-4-2EHOLM	30 TAC Chapter 115, Loading and Unloading of VOC	115C-1	Chapter 115 Facility Type = Marine terminal Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure less than 0.5 psia.
5-4-IBALU	30 TAC Chapter 115, Loading and Unloading of VOC	115C-1	Chapter 115 Control Device Type = Vapor control system with a direct flame incinerator. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only unloading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized. Control Options = Vapor control system that maintains a control efficiency of at least 90%.
5-4-LIBOL	30 TAC Chapter 115, Loading and Unloading of VOC	115C-1	Chapter 115 Control Device Type = Vapor control system with a direct flame incinerator. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized. Control Options = Vapor control system that maintains a control efficiency of at least 90%.

Unit ID	Regulation	Index Number	Basis of Determination*
5-4-LOAD	30 TAC Chapter 115, Loading and Unloading of VOC	115C-1	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure less than 0.5 psia.
5-4-NBOLL	30 TAC Chapter 115, Loading and Unloading of VOC	115C-1	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure less than 0.5 psia.
5-4-NBOLM	30 TAC Chapter 115, Loading and Unloading of VOC	115C-1	Chapter 115 Facility Type = Marine terminal Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure less than 0.5 psia.
5-1-H1	30 TAC Chapter 117, Subchapter B	117B-1	Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent. Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a). Unit Type = Process heater CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr. CO Monitoring System = Continuous emission monitoring system complying with 30 TAC § 117.8100(a)(1). NOx Emission Limit Basis = Emission limit basis is not a 30 day rolling average or a block one-hour average NH3 Emission Limitation = Title 30 TAC § 117.310(c)(2) NOx Reduction = Post combustion control technique with ammonia injection Fuel Type #1 = Natural gas NH3 Monitoring = Mass balance Fuel Type #2 = Gaseous fuel other than natural gas, landfill gas or renewable non-fossil fuel gases NOx Monitoring System = Continuous emissions monitoring system Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on a rolling 12-month average. NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8)
5-1-H1	40 CFR Part 63, Subpart DDDDD	63DDDDD-1	Construction/Reconstruction Date = Construction or reconstruction began after June 4, 2010.

Unit ID	Regulation	Index Number	Basis of Determination*
5-1-FL90	30 TAC Chapter 111, Visible Emissions	111A-1	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.
5-1-FL90	40 CFR Part 60, Subpart A	60A-1	Subject to 40 CFR § 60.18 = Flare is not subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the requirements in 40 CFR § 60.18(c)(3)(i).
5-2-FL200	30 TAC Chapter 111, Visible Emissions	111A-1	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.
5-2-FL200	30 TAC Chapter 115, HRVOC Vent Gas	115H-1	Monitoring Requirements = Flare is complying with the continuous monitoring requirements of § 115.725(d). Out of Service = Flare was not permanently out of service by April 1, 2006. Total Gas Stream = Flare receives a total gas stream with greater than 100 ppmv HRVOC at some time. Gas Stream Concentration = Flare receives a gas stream containing 5% or greater HRVOC by weight at some time. Alternative Monitoring Approach = No alternative monitoring approaches as outlined in 115.725(m)(1) or 115.725(m)(2) are used. Modifications to Testing/Monitoring = No modifications to test methods or monitoring methods specified in this section. Flare Type = Flare is in multi-purpose service. Tank Service = Flare is not in dedicated service for storage tanks with 95% or greater of an individual HRVOC.
5-2-FL200	40 CFR Part 60, Subpart A	60A-1	Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4)(i)-(iii) or (c)(5). Flare Assist Type = Steam-assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
5-2-FL200A	30 TAC Chapter 111, Visible Emissions	111A-1	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.
5-2-FL200A	30 TAC Chapter 115, HRVOC Vent Gas	115H-1	Out of Service = Flare was not permanently out of service by April 1, 2006. Total Gas Stream = Flare receives a total gas stream with greater than 100 ppmv HRVOC at some time. Gas Stream Concentration = Flare receives a gas stream containing 5% or greater HRVOC by weight at some time. Alternative Monitoring Approach = No alternative monitoring approaches as outlined in 115.725(m)(1) or 115.725(m)(2) are used. Modifications to Testing/Monitoring = No modifications to test methods or monitoring methods specified in this section. Flare Type = Flare is complying with the requirements of § 115.725(d) to demonstrate compliance. Tank Service = Flare is not in dedicated service for storage tanks with 95% or greater of an individual HRVOC.

Unit ID	Regulation	Index Number	Basis of Determination*
5-2-FL200A	40 CFR Part 60, Subpart A	60A-1	Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4)(i)-(iii) or (c)(5). Flare Assist Type = Non-assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
5-2-FUGITIV	30 TAC Chapter 115, HRVOC Fugitive Emissions	115H-1	Agitators = The fugitive unit does not contain agitators. Alternative Work Practice in § 115.358 = No components are complying with the alternative work practice requirements in 30 TAC § 115.358. Compressor Seals = The fugitive unit contains compressor seals. Open-ended Valves or Lines = The fugitive unit does not contain open-ended valves or lines. Process Drains = The fugitive unit does not contain process drains. Title 30 TAC §115.780 Applicable = The fugitive unit contains a defined process and Highly Reactive VOC. Valves (not pressure relief, open-ended or bypass line valves) = The fugitive unit contains valves other than pressure relief, open-ended or bypass line valves. ACR = No compressor seals are complying with an alternate control requirement. Less Than 250 Components at Site = The fugitive unit is located at a site with at least 250 fugitive components in VOC service. Weight Percent HRVOC = Components in the fugitive unit contact process fluids that contain less than 5.0% HRVOC by weight and process fluids that contain HRVOC at 5.0%, or greater, by weight on an annual average basis. Complying with § 115.781(b)(9) = Valves (other than pressure relief, open-ended, and bypass line) are complying with the requirements of § 115.781(b)(9). Pumps with Shaft Seal System = Pumps are equipped with a shaft sealing system that prevents or detects emission of VOC from the seal. Bypass Line Valves = The fugitive unit contains bypass line valves. Compressors with Shaft Seal System = No compressors are equipped with a shaft sealing system that prevents or detects emission of VOC from the seal. Flanges or Other Connectors = The fugitive unit contains flanges or other connectors. Heat Exchanger Heads, etc. = The fugitive unit contains heat exchanger heads, sight glasses, meters, gauges, sampling connections, bolter manways, hatches, sump covers, junction vent boxes or covers and seals on VOC water separators. Pressure Relief Valves = The fugitive unit contains pressure relief valves. Pump Seals = The fugitive unit contains pump seals. ACR = No bypass line valves are complying with an alternate control requirement. Agitators with Shaft Seal System = No agitators are equipped with a shaft sealing system that prevents or detects emission of VOC from the seal. Complying with § 115.781(b)(9) = Pressure relief valves are complying with the requirements of § 115.781(b)(9).

Unit ID	Regulation	Index Number	Basis of Determination*
5-2-FUGITIV	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	115D-1	Agitators = The fugitive unit does not contain agitators. Compressor Seals = The fugitive unit contains compressor seals. Flanges = The fugitive unit contains flanges. Open-ended Valves = The fugitive unit does not contain open-ended valves. Pressure Relief Valves = The fugitive unit contains pressure relief valves. Process Drains = The fugitive unit does not have process drains. Pump Seals = The fugitive unit contains pump seals. Rupture Disks = The fugitive unit has pressure relief valves equipped with rupture disks. Title 30 TAC § 115.352 Applicable = Site is a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process or a natural gas/gasoline processing operation as defined in 30 TAC 115.10. Valves (other than pressure relief and open-ended) = The fugitive unit contains valves other than pressure relief valves or open-ended valves or lines. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for compressor seals or no alternate has been requested. Instrumentation Systems = The fugitive unit has instrumentation systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169. Less Than 250 Components at Site = Fugitive unit not located at site with less than 250 fugitive components. Sampling Connection Systems = The fugitive unit has sampling connection systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169. Weight Percent VOC = All components contact a process fluid that contains greater than or equal to 10% VOC by weight. 50% by Volume = Compressors are not in hydrogen service or are in hydrogen service and the hydrogen content cannot be reasonably expected to always exceed 50% by volume. Complying with § 115.352(1) = Valves are complying with § 115.352(1). Complying with 30 TAC § 115.352(1) = Flanges are complying with the requirements in 30 TAC § 115.352(1). Reciprocating Compressors Or Positive Displacement Pumps = The fugitive unit does not have reciprocating compressors or positive displacement pumps used in natural gas/gasoline processing operations. Shaft Seal System = Pump seals are equipped with a shaft seal system that prevents or detects emission of VOC from the seal. TVP 0.002 PSIA or Less = The fugitive unit does not have components or systems that contact a process fluid containing VOC having a true vapor pressure less than or equal to 0.002 psia at 68 degrees Fahrenheit. Shaft Seal System = Compressors are not equipped with a shaft sealing system that prevents or detects emission of VOC from the seal. TVP of Process Fluid VOC <= 0.044 psia at 68° F = No valves contact a process fluid with a TVP less than or equal to 0.044 psia at 68° F. TVP of Process Fluid VOC <= 0.044 PSIA AT 68• ° F = Pump seals do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit. Complying with 30 TAC § 115.352(1) = Pump seals are complying with the requirements in 30 TAC § 115.352(1). TVP of Process Fluid VOC <= 0.044 PSIA AT 68• ° F = Compressor seals do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit. TVP of Process Fluid VOC > 0.044 psia at 68° F = Valves contact a process fluid with a TVP greater than 0.044 psia at 68° F. TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit. Complying with § 115.352(1) = Compressor seals are complying with the requirements in 30 TAC § 115.352(1).

Unit ID	Regulation	Index Number	Basis of Determination*
5-2-FUGITIV	40 CFR Part 60, Subpart VV	60VV-1	Closed Vent (or Vapor Collection) Systems = The fugitive unit contains closed vent or vapor collection systems. Compressors = The fugitive unit contains compressors. Enclosed Combustion Device = The fugitive unit does not contain enclosed combustion devices. Equipment in VOC Service = The fugitive unit contains equipment designed to operate in VOC service. Flare = The fugitive unit contains flares. Pressure Relief Devices in Heavy or Light Liquid Service = Fugitive unit contains pressure relief devices in heavy or light liquid service. Produces Chemicals = The fugitive unit is part of a facility that produces as an intermediate or final product one or more of the chemicals listed in 40 CFR § 60.489. Pumps in Heavy Liquid Service = The fugitive unit does not contain pumps in heavy liquid service. Sampling Connection Systems = The fugitive unit contains sampling connection systems. Valves in Gas/Vapor or Light Liquid Service = The fugitive unit contains valves in gas/vapor or light liquid service. Vapor Recovery System = The fugitive unit does not contain vapor recovery systems. 2.0% = The fugitive unit is not complying with an allowable percentage of valves leaking equal to or less than 2.0%. Affected Facility = The fugitive unit is part of a facility that is an affected facility as defined in 40 CFR § 60.480(a)(2). Equivalent Emission Limitation = No equivalent emission limitation is used for closed vent or vapor collection systems. Vacuum Service = The fugitive unit does not contain equipment in vacuum service. Construction/Modification Date = After January 5, 1981 and on or before November 7, 2006. Equivalent Emission Limitation = No equivalent emission limitation is used for valves in gas/vapor or light liquid service. VOC Service = Fugitive unit does not contain equipment designed to operate in VOC service less than 300 hours per year. Compliance Option = Choosing to comply with the provisions of 40 CFR Part 60, Subpart VV. Complying with 40 CFR § 60.482-10 = Flares are complying with § 60.482-10. Complying with 40 CFR § 60.482-3 = Compressors are complying with § 60.482-3. Complying with 40 CFR § 60.482-5 = Sampling connection systems are complying with § 60.482-5. Complying with 40 CFR § 60.482-8 = Pressure relief devices in heavy or light liquid service are complying with the requirements of § 60.482-8. Pumps in Light Liquid Service = The fugitive unit contains pumps in light liquid service. Complying with 40 CFR § 60.482-7 = Valves in gas/vapor or light liquid service are complying with § 60.482-7. Design Capacity = Site with a design capacity is greater than or equal to 1,000 Mg/yr. Equivalent Emission Limitation = No equivalent emission limitation is used for pumps in light liquid service. Flanges and Other Connectors = The fugitive unit contains flanges and other connectors. Open-ended Valves or Lines = The fugitive unit does not contain open-ended valves or lines. Pressure Relief Devices in Gas/Vapor Service = The fugitive unit contains pressure relief devices in gas/vapor service. Valves in Heavy Liquid Service = The fugitive unit does not contain valves in heavy liquid service. Equivalent Emission Limitation = No equivalent emission limitation is used for flanges and other connectors. Produces Heavy Liquid Chemicals = The facility produces chemicals other than or in addition to heavy liquid chemicals only from heavy liquid feed or raw materials. Beverage Alcohol Production = The facility does not produce only beverage alcohol.

Unit ID	Regulation	Index Number	Basis of Determination*
			Complying with 40 CFR § 60.482-2 = Pumps in light liquid service are complying with § 60.482-2. Complying with 40 CFR § 60.482-8 = Flanges and other connectors are complying with § 60.482-8.
PROOXO	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	115D-1	Agitators = The fugitive unit does not contain agitators. Compressor Seals = The fugitive unit does not contain compressor seals. Flanges = The fugitive unit contains flanges. Open-ended Valves = The fugitive unit does not contain open-ended valves. Pressure Relief Valves = The fugitive unit contains pressure relief valves. Process Drains = The fugitive unit does not have process drains. Pump Seals = The fugitive unit contains pump seals. Rupture Disks = The fugitive unit has pressure relief valves equipped with rupture disks. Title 30 TAC § 115.352 Applicable = Site is a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process or a natural gas/gasoline processing operation as defined in 30 TAC 115.10. Valves (other than pressure relief and open-ended) = The fugitive unit contains valves other than pressure relief valves or open-ended valves or lines. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for pump seals or no alternate has been requested. Instrumentation Systems = The fugitive unit has instrumentation systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169. Less Than 250 Components at Site = Fugitive unit not located at site with less than 250 fugitive components. Sampling Connection Systems = The fugitive unit has sampling connection systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169. Weight Percent VOC = All components contact a process fluid that contains greater than or equal to 10% VOC by weight. Complying with § 115.352(1) = Valves are complying with § 115.352(1). Complying with 30 TAC § 115.352(1) = Flanges are complying with the requirements in 30 TAC § 115.352(1). Reciprocating Compressors Or Positive Displacement Pumps = The fugitive unit does not have reciprocating compressors or positive displacement pumps used in natural gas/gasoline processing operations. Shaft Seal System = Pump seals are equipped with a shaft seal system that prevents or detects emission of VOC from the seal. TVP 0.002 PSIA or Less = The fugitive unit has components or systems that contact a process fluid containing VOC having a true vapor pressure less than or equal to 0.002 psia at 68 degrees Fahrenheit. TVP of Process Fluid VOC <= 0.044 psia at 68° F = No pressure relief valves contact a process fluid with a TVP of less than or equal to 0.044 psia at 68° F. TVP of Process Fluid VOC <= 0.044 psia at 68° F = Valves contact a process fluid with a TVP less than or equal to 0.044 psia at 68° F. TVP of Process Fluid VOC <= 0.044 PSIA AT 68• ° F = Pump seals contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit. Complying with 30 TAC § 115.352(1) = Pump seals are complying with the requirements in 30 TAC § 115.352(1). TVP of Process Fluid VOC > 0.044 psia at 68° F = Pressure relief valves contact a process fluid with a TVP > 0.044 psia at 68° F. TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit.

Unit ID	Regulation	Index Number	Basis of Determination*
PROOXO	40 CFR Part 60, Subpart VV	60VV-1	Closed Vent (or Vapor Collection) Systems = The fugitive unit contains closed vent or vapor collection systems. Compressors = The fugitive unit does not contain compressors. Enclosed Combustion Device = The fugitive unit does not contain enclosed combustion devices. Equipment in VOC Service = The fugitive unit contains equipment designed to operate in VOC service. Flare = The fugitive unit contains flares. Pressure Relief Devices in Heavy or Light Liquid Service = Fugitive unit contains pressure relief devices in heavy or light liquid service. Produces Chemicals = The fugitive unit is part of a facility that produces as an intermediate or final product one or more of the chemicals listed in 40 CFR § 60.489. Pumps in Heavy Liquid Service = The fugitive unit contains pumps in heavy liquid service. Sampling Connection Systems = The fugitive unit contains sampling connection systems. Valves in Gas/Vapor or Light Liquid Service = The fugitive unit contains valves in gas/vapor or light liquid service. Vapor Recovery System = The fugitive unit does not contain vapor recovery systems. 2.0% = The fugitive unit is not complying with an allowable percentage of valves leaking equal to or less than 2.0%. Affected Facility = The fugitive unit is part of a facility that is an affected facility as defined in 40 CFR § 60.480(a)(2). Equivalent Emission Limitation = No equivalent emission limitation is used for closed vent or vapor collection systems. Vacuum Service = The fugitive unit does not contain equipment in vacuum service. Construction/Modification Date = After January 5, 1981 and on or before November 7, 2006. Equivalent Emission Limitation = No equivalent emission limitation is used for valves in gas/vapor or light liquid service. VOC Service = Fugitive unit does not contain equipment designed to operate in VOC service less than 300 hours per year. Compliance Option = Choosing to comply with the provisions of 40 CFR Part 60, Subpart VV. Complying with 40 CFR § 60.482-10 = Flares are complying with § 60.482-10. Complying with 40 CFR § 60.482-5 = Sampling connection systems are complying with § 60.482-5. Complying with 40 CFR § 60.482-8 = Pumps in heavy liquid service are complying with § 60.482-8. Pumps in Light Liquid Service = The fugitive unit contains pumps in light liquid service. Complying with 40 CFR § 60.482-7 = Valves in gas/vapor or light liquid service are complying with § 60.482-7. Design Capacity = Site with a design capacity is greater than or equal to 1,000 Mg/yr. Equivalent Emission Limitation = No equivalent emission limitation is used for pumps in light liquid service. Flanges and Other Connectors = The fugitive unit contains flanges and other connectors. Open-ended Valves or Lines = The fugitive unit does not contain open-ended valves or lines. Pressure Relief Devices in Gas/Vapor Service = The fugitive unit does not contain pressure relief devices in gas/vapor service. Valves in Heavy Liquid Service = The fugitive unit contains valves in heavy liquid service. Equivalent Emission Limitation = No equivalent emission limitation is used for valves in heavy liquid service. Produces Heavy Liquid Chemicals = The facility produces chemicals other than or in addition to heavy liquid chemicals only from heavy liquid feed or raw materials. Beverage Alcohol Production = The facility does not produce only beverage alcohol. Complying with 40 CFR § 60.482-2 = Pumps in light liquid service are complying with § 60.482-2.

Unit ID	Regulation	Index Number	Basis of Determination*
			Complying with 40 CFR § 60.482-8 = Valves in heavy liquid service are complying with § 60.482-8.
5-2-CT20	30 TAC Chapter 115, HRVOC Cooling Towers	115H-1	Cooling Tower Heat Exchange System Exemptions = The cooling tower heat exchange system does not qualify for an exemption. Jacketed Reactor = The cooling tower heat exchange system is not in dedicated service to a jacketed reactor. Alternative Monitoring = Complying with the specified monitoring in 30 TAC § 115.764. Design Capacity = Design capacity to circulate 8000 gpm or greater. Finite Volume System = The cooling tower heat exchange system is complying with the requirements in § 115.764(a). Modified Monitoring = NOT USING MINOR MODIFICATIONS TO THE MONITORING AND TESTING METHODS IN 30 TAC § 115.764. Flow Monitoring/Testing Method = Choosing to use a continuous flow monitor on each inlet of each cooling tower in accordance with § 115.764(a)(1), (b)(1), or (h)(1). Total Strippable VOC = The cooling tower heat exchange system is complying with the requirements of § 115.764(a). On-Line Monitor = A continuous on-line monitor capable of providing total HRVOC and speciated HRVOCs in ppbw is being used.
5-2-CT20	40 CFR Part 63, Subpart Q	63Q-1	Used Compounds Containing Chromium on or After September 8, 1994 = The industrial process cooling tower has not used compounds containing chromium on or after September 8, 1994.
5-1-05	30 TAC Chapter 115, Vent Gas Controls	115B-1	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
5-1-31	30 TAC Chapter 111, Visible Emissions	111A-1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.
5-1-31	30 TAC Chapter 115, Vent Gas Controls	115B-1	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.

Unit ID	Regulation	Index Number	Basis of Determination*
			Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
5-2-02	30 TAC Chapter 115, Vent Gas Controls	115B-1	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Smokeless flare Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
5-2-03	30 TAC Chapter 115, Vent Gas Controls	115B-1	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Smokeless flare Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.

Unit ID	Regulation	Index Number	Basis of Determination*
5-2-04	30 TAC Chapter 115, Vent Gas Controls	115B-1	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
5-2-05	30 TAC Chapter 115, Vent Gas Controls	115B-1	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
5-4-31	30 TAC Chapter 115, Vent Gas Controls	115B-1	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
GRP-NNNH1	40 CFR Part 60, Subpart NNN	60NNN-1	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Total Resource Effectiveness = TRE index value less than 8.0 not from a halogenated vent stream. Construction/Modification Date = After December 30, 1983. TOC Reduction = Compliance is achieved by reducing total organic compound emissions (less methane and ethane) by 98 weight-percent or to a concentration of 20 ppmv dry basis corrected to 3 percent oxygen using a VOC emissions non-flare combustion control device. Subpart NNN Control Device = Boiler or process heater design heat input capacity greater than or equal to 44 MW (150 MMBtu/hr).

Unit ID	Regulation	Index Number	Basis of Determination*
			Vent Type = Two or more distillation units discharging vent stream into a common vapor recovery system. Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3). Total Design Capacity = 1 gigagram per year or greater. Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.
GRP-NNNTO5	40 CFR Part 60, Subpart NNN	60NNN-1	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Total Resource Effectiveness = TRE index value less than 8.0 not from a halogenated vent stream. Construction/Modification Date = After December 30, 1983. TOC Reduction = Compliance is achieved by reducing total organic compound emissions (less methane and ethane) by 98 weight-percent or to a concentration of 20 ppmv dry basis corrected to 3 percent oxygen using a VOC emissions non-flare combustion control device. Subpart NNN Control Device = Thermal incinerator. Vent Type = Two or more distillation units discharging vent stream into a common vapor recovery system. Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3). Total Design Capacity = 1 gigagram per year or greater. Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.
5-4-P511	30 TAC Chapter 115, Industrial Wastewater	115B-1	Petroleum Refinery = The affected source category is not a petroleum refinery. Wastewater Component Type = A wastewater component that is exempted from the control requirements of 30 TAC § 115.142 because it handles only exempted wastewater streams under 30 TAC § 115.147(2). Alternate Control Requirement = An alternate control requirement (ACR) or exemption criteria in accordance with 30 TAC § 115.910 is not used. Roof or Seal Type = The wastewater component does not have a floating roof or internal floating roof. 90% Overall Control Option = The unit is complying with the control requirements of 30 TAC § 115.142. Monitoring Type = The monitoring requirements of 30 TAC §§ 115.144(3)(A) - (H) are being used. Safety Hazard Exemption = No safety hazard exemption has been requested or none has been approved.
5-2-R100	40 CFR Part 60, Subpart RRR	60RRR-1	Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate. Total Design Capacity = Total design capacity is 1 gigagram per year (1,100 tons per year) or greater. Bypass Line = There is no bypass line valve. Construction/Modification Date = After June 29, 1990. Vent Stream Flow Rate = Vent stream flow rate is 0.011 scm/min or greater, or value is not measured. Affected Facility Type = Reactor process not discharging its vent stream into a recovery system. TOC Exemption = No TOC concentration exemption. Control Device = Boiler or process heater with design heat input of 44 MW (150MMBTU/hr) or greater. Subject to Title 40 CFR Part 60, Subpart DDD = The reactor process is not subject to the provisions of Title 40 CFR Part 60, Subpart DDD. Subject to Title 40 CFR Part 60, Subpart NNN = The vent stream is routed to a distillation unit subject to Title 40 CFR Part 60, Subpart NNN and has no other releases to the air except for a pressure relief valve.

Unit ID	Regulation	Index Number	Basis of Determination*
			TRE Index Value = TRE index value is less than or equal to 8.0 or a TRE index value is not calculated or claimed for exemption 40 CFR § 60.700(c)(2). TRE for Halogenated Vent Stream = TRE index value is being calculated for a nonhalogenated vent stream.
GRP-RRRH1	40 CFR Part 60, Subpart RRR	60RRR-1	Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate. Total Design Capacity = Total design capacity is 1 gigagram per year (1,100 tons per year) or greater. Bypass Line = There is no bypass line valve. Construction/Modification Date = After June 29, 1990. Vent Stream Flow Rate = Vent stream flow rate is 0.011 scm/min or greater, or value is not measured. Affected Facility Type = Combination of two or more reactor processes and the common recovery system into which their vent streams are discharged. TOC Exemption = No TOC concentration exemption. Control Device = Boiler or process heater with design heat input of 44 MW (150MMBTU/hr) or greater. Subject to Title 40 CFR Part 60, Subpart DDD = The reactor process is not subject to the provisions of Title 40 CFR Part 60, Subpart DDD. Subject to Title 40 CFR Part 60, Subpart NNN = The vent stream is routed to a distillation unit subject to Title 40 CFR Part 60, Subpart NNN and has no other releases to the air except for a pressure relief valve. TRE Index Value = TRE index value is less than or equal to 8.0 or a TRE index value is not calculated or claimed for exemption 40 CFR § 60.700(c)(2). TRE for Halogenated Vent Stream = TRE index value is being calculated for a nonhalogenated vent stream.

* - The “unit attributes” or operating conditions that determine what requirements apply

NSR vs. Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit (FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOPs are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. In addition, many of the permits are accessible online through the link provided below. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. Permit by Rule (PBR) registrations submitted by permittees are also available online through the link provided below. The following table specifies the PBRs that apply to the site.

The TCEQ has interpreted the emission limits prescribed in 30 TAC §106.4(a) as both emission thresholds and default emission limits. The emission limits in 30 TAC §106.4(a) are all considered applicable to each facility as a threshold matter to ensure that the owner/operator qualifies for the PBR authorization. Those same emission limits are also the default emission limits if the specific PBR does not further limit emissions or there is no lower, certified emission limit claimed by the owner/operator.

This interpretation is consistent with how TCEQ has historically determined compliance with the emission limits prior to the addition of the “as applicable” language. The “as applicable” language was added in 2014 as part of changes to the sentence structure in a rulemaking that made other changes to address greenhouse gases and was not intended as a substantive rule change. This interpretation also provides for effective and practical enforcement of 30 TAC §106.4(a), since for the TCEQ to effectively enforce the emission limits in 30 TAC §106.4(a) as emission thresholds, all emission limits must apply. As provided by 30 TAC §106.4(a)(2) and (3), an owner/operator shall not claim a PBR authorization if the facility is subject to major New Source Review. The practical and legal effect of the language in 30 TAC § 106.4 is that if a facility does not emit a pollutant, then the potential to emit for that particular pollutant is zero, and thus, the facility is not authorized to emit the pollutant pursuant to the PBR.

The status of air permits, applications, and PBR registrations may be found by performing the appropriate search of the databases located at the following website:

www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

Details on how to search the databases are available in the **Obtaining Permit Documents** section below.

New Source Review Authorization References

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 147317	Issuance Date: 07/17/2017
Authorization No.: 54190	Issuance Date: 08/01/2012
Authorization No.: 8074A	Issuance Date: 10/25/2018
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.264	Version No./Date: 09/04/2000
Number: 106.355	Version No./Date: 11/01/2001
Number: 106.478	Version No./Date: 09/04/2000

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the "Maximum Allowable Emission Rate Table", or "MAERT" for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information	
ID No.: 5-1-31	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111A-1
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per week	
Averaging Period: n/a	
Deviation Limit: There shall be no visible emissions. If visible emissions are observed, the permit holder shall either report a deviation or perform Test Method 9 and opacity shall not exceed 15%.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations. The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: 5-1-31	
Control Device ID No.: 5-1-H1	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: 115B-1
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Period of Operation	
Minimum Frequency: n/a	
Averaging Period: n/a	
Deviation Limit: All periods of operation that are not recorded shall be considered and reported as a deviation.	
Basis of monitoring: A common way to control VOC emissions is to route emissions to a boiler or process heater with a design heat input capacity of 44 MW or greater with minimum temperatures of 1100 ºC and residence times greater than one second. Boilers and process heaters with the stated design have demonstrated to meet 98% reduction efficiency; therefore, it is only necessary to document the period of operation of the control equipment. Additionally, in the October 21, 1983 preamble to 40 CFR Part 60, Subpart III, (48 FR 48945), the EPA determined that installing a steam generating unit, with a design heat input capacity of 44 MW or greater, to control VOC emissions, is an acceptable means of demonstrating compliance with 40 CFR Part 60, Subpart III and waived the requirement for a performance test on such devices. Monitoring the period of operation of a boiler/process heater greater than 44 MW is commonly required in federal rules, including: 40 CFR Part 60, Subparts III and NNN; 40 CFR Part 61, Subpart BB; 40 CFR Part 63, Subpart G.	

Unit/Group/Process Information	
ID No.: 5-2-D122	
Control Device ID No.: 5-4-TO5	Control Device Type: Vapor Collection System
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Kb	SOP Index No.: 60Kb-1
Pollutant: VOC	Main Standard: [G]§ 60.112b(a)(3)
Monitoring Information	
Indicator: VOC Concentration	
Minimum Frequency: Once per year	
Averaging Period: n/a	
Deviation Limit: Measure and record fugitive emissions from the vapor collection system. An instrument reading of greater than or equal to 500 ppm above background shall be reported as a deviation.	
Basis of monitoring: It is widely practiced and accepted to monitor the VOC concentration at the outlet of a control device by use of a portable analyzer with procedures such as EPA Test Method 25A or a VOC CEMS. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard. Outlet VOC concentration has been used as an indicator of VOC emissions in many federal rules including 40 CFR Part 60, Subpart III, 40 CFR Part 60, Subpart NNN, 40 CFR Part 60, Subpart RRR, 40 CFR Part 61, Subpart BB, 40 CFR Part 61, Subpart FF, 40 CFR Part 63, Subpart R, 40 CFR Part 63, Subpart DD, and 40 CFR Part 63, Subpart HH.	

Unit/Group/Process Information	
ID No.: 5-2-D122	
Control Device ID No.: 5-4-TO5	Control Device Type: Vapor Collection System
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Kb	SOP Index No.: 60Kb-1
Pollutant: VOC	Main Standard: [G]§ 60.112b(a)(3)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Once per year	
Averaging Period: n/a	
Deviation Limit: Visually inspect all components of the vapor collection system for defects. Failure to inspect or detection of defects shall be reported as a deviation.	
Basis of monitoring: It is widely practiced and accepted to use work practice as a monitoring option to demonstrate compliance. Preventive maintenance and visual inspections of control equipment, as recommended by the manufacturer, conducted by the owner or operator can ensure that the unit is operating properly. The work practice requirements prescribe that preventive maintenance and/or visual inspections be performed and recorded in a log. This option assures that the owner or operator is adequately maintaining the control equipment.	

Unit/Group/Process Information	
ID No.: 5-2-D122	
Control Device ID No.: 5-4-TO5	Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer)
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Kb	SOP Index No.: 60Kb-1
Pollutant: VOC	Main Standard: [G]§ 60.112b(a)(3)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a	
Deviation Limit: Minimum combustion temperature shall not be below 740 degrees Celsius.	
Basis of monitoring: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for thermal incinerators. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of the combustion temperature of a thermal incinerator is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, R, DD, EE, and HH; and 30 TAC Chapter 115.	

Unit/Group/Process Information	
ID No.: 5-2-D204	
Control Device ID No.: 5-4-TO5	Control Device Type: Vapor Collection System
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Kb	SOP Index No.: 60Kb-1
Pollutant: VOC	Main Standard: [G]§ 60.112b(a)(3)
Monitoring Information	
Indicator: VOC Concentration	
Minimum Frequency: Once per year	
Averaging Period: n/a	
Deviation Limit: Measure and record fugitive emissions from the vapor collection system. An instrument reading of greater than or equal to 500 ppm above background shall be reported as a deviation.	
Basis of monitoring: It is widely practiced and accepted to monitor the VOC concentration at the outlet of a control device by use of a portable analyzer with procedures such as EPA Test Method 25A or a VOC CEMS. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard. Outlet VOC concentration has been used as an indicator of VOC emissions in many federal rules including 40 CFR Part 60, Subpart III, 40 CFR Part 60, Subpart NNN, 40 CFR Part 60, Subpart RRR, 40 CFR Part 61, Subpart BB, 40 CFR Part 61, Subpart FF, 40 CFR Part 63, Subpart R, 40 CFR Part 63, Subpart DD, and 40 CFR Part 63, Subpart HH.	

Unit/Group/Process Information	
ID No.: 5-2-D204	
Control Device ID No.: 5-4-TO5	Control Device Type: Vapor Collection System
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Kb	SOP Index No.: 60Kb-1
Pollutant: VOC	Main Standard: [G]§ 60.112b(a)(3)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Once per year	
Averaging Period: n/a	
Deviation Limit: Visually inspect all components of the vapor collection system for defects. Failure to inspect or detection of defects shall be reported as a deviation.	
Basis of monitoring: It is widely practiced and accepted to use work practice as a monitoring option to demonstrate compliance. Preventive maintenance and visual inspections of control equipment, as recommended by the manufacturer, conducted by the owner or operator can ensure that the unit is operating properly. The work practice requirements prescribe that preventive maintenance and/or visual inspections be performed and recorded in a log. This option assures that the owner or operator is adequately maintaining the control equipment.	

Unit/Group/Process Information	
ID No.: 5-2-D204	
Control Device ID No.: 5-4-TO5	Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer)
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Kb	SOP Index No.: 60Kb-1
Pollutant: VOC	Main Standard: [G]§ 60.112b(a)(3)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a	
Deviation Limit: Minimum combustion temperature shall not be below 740 degrees Celsius.	
Basis of monitoring: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for thermal incinerators. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of the combustion temperature of a thermal incinerator is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, R, DD, EE, and HH; and 30 TAC Chapter 115.	

Unit/Group/Process Information	
ID No.: 5-2-D208	
Control Device ID No.: 5-4-TO5	Control Device Type: Vapor Collection System
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Kb	SOP Index No.: 60Kb-1
Pollutant: VOC	Main Standard: [G]§ 60.112b(a)(3)
Monitoring Information	
Indicator: VOC Concentration	
Minimum Frequency: Once per year	
Averaging Period: n/a	
Deviation Limit: Measure and record fugitive emissions from the vapor collection system. An instrument reading of greater than or equal to 500 ppm above background shall be reported as a deviation.	
Basis of monitoring: It is widely practiced and accepted to monitor the VOC concentration at the outlet of a control device by use of a portable analyzer with procedures such as EPA Test Method 25A or a VOC CEMS. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard. Outlet VOC concentration has been used as an indicator of VOC emissions in many federal rules including 40 CFR Part 60, Subpart III, 40 CFR Part 60, Subpart NNN, 40 CFR Part 60, Subpart RRR, 40 CFR Part 61, Subpart BB, 40 CFR Part 61, Subpart FF, 40 CFR Part 63, Subpart R, 40 CFR Part 63, Subpart DD, and 40 CFR Part 63, Subpart HH.	

Unit/Group/Process Information	
ID No.: 5-2-D208	
Control Device ID No.: 5-4-TO5	Control Device Type: Vapor Collection System
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Kb	SOP Index No.: 60Kb-1
Pollutant: VOC	Main Standard: [G]§ 60.112b(a)(3)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Once per year	
Averaging Period: n/a	
Deviation Limit: Visually inspect all components of the vapor collection system for defects. Failure to inspect or detection of defects shall be reported as a deviation.	
Basis of monitoring: It is widely practiced and accepted to use work practice as a monitoring option to demonstrate compliance. Preventive maintenance and visual inspections of control equipment, as recommended by the manufacturer, conducted by the owner or operator can ensure that the unit is operating properly. The work practice requirements prescribe that preventive maintenance and/or visual inspections be performed and recorded in a log. This option assures that the owner or operator is adequately maintaining the control equipment.	

Unit/Group/Process Information	
ID No.: 5-2-D208	
Control Device ID No.: 5-4-TO5	Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer)
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Kb	SOP Index No.: 60Kb-1
Pollutant: VOC	Main Standard: [G]§ 60.112b(a)(3)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a	
Deviation Limit: Minimum combustion temperature shall not be below 740 degrees Celsius.	
Basis of monitoring: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for thermal incinerators. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of the combustion temperature of a thermal incinerator is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, R, DD, EE, and HH; and 30 TAC Chapter 115.	

Unit/Group/Process Information	
ID No.: 5-2-D209	
Control Device ID No.: 5-4-TO5	Control Device Type: Vapor Collection System
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Kb	SOP Index No.: 60Kb-1
Pollutant: VOC	Main Standard: [G]§ 60.112b(a)(3)
Monitoring Information	
Indicator: VOC Concentration	
Minimum Frequency: Once per year	
Averaging Period: n/a	
Deviation Limit: Measure and record fugitive emissions from the vapor collection system. An instrument reading of greater than or equal to 500 ppm above background shall be reported as a deviation.	
Basis of monitoring: It is widely practiced and accepted to monitor the VOC concentration at the outlet of a control device by use of a portable analyzer with procedures such as EPA Test Method 25A or a VOC CEMS. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard. Outlet VOC concentration has been used as an indicator of VOC emissions in many federal rules including 40 CFR Part 60, Subpart III, 40 CFR Part 60, Subpart NNN, 40 CFR Part 60, Subpart RRR, 40 CFR Part 61, Subpart BB, 40 CFR Part 61, Subpart FF, 40 CFR Part 63, Subpart R, 40 CFR Part 63, Subpart DD, and 40 CFR Part 63, Subpart HH.	

Unit/Group/Process Information	
ID No.: 5-2-D209	
Control Device ID No.: 5-4-TO5	Control Device Type: Vapor Collection System
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Kb	SOP Index No.: 60Kb-1
Pollutant: VOC	Main Standard: [G]§ 60.112b(a)(3)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Once per year	
Averaging Period: n/a	
Deviation Limit: Visually inspect all components of the vapor collection system for defects. Failure to inspect or detection of defects shall be reported as a deviation.	
Basis of monitoring: It is widely practiced and accepted to use work practice as a monitoring option to demonstrate compliance. Preventive maintenance and visual inspections of control equipment, as recommended by the manufacturer, conducted by the owner or operator can ensure that the unit is operating properly. The work practice requirements prescribe that preventive maintenance and/or visual inspections be performed and recorded in a log. This option assures that the owner or operator is adequately maintaining the control equipment.	

Unit/Group/Process Information	
ID No.: 5-2-D209	
Control Device ID No.: 5-4-TO5	Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer)
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Kb	SOP Index No.: 60Kb-1
Pollutant: VOC	Main Standard: [G]§ 60.112b(a)(3)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a	
Deviation Limit: Minimum combustion temperature shall not be below 740 degrees Celsius.	
Basis of monitoring: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for thermal incinerators. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of the combustion temperature of a thermal incinerator is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, R, DD, EE, and HH; and 30 TAC Chapter 115.	

Obtaining Permit Documents

The New Source Review Authorization References table in the FOP specifies all NSR authorizations that apply at the permit area covered by the FOP. Individual NSR permitting files are located in the TCEQ Central File Room (TCEQ Main Campus located at 12100 Park 35 Circle, Austin, Texas, 78753, Building E, Room 103). They can also be obtained electronically from TCEQ's Central File Room Online (https://www.tceq.texas.gov/goto/cfr-online). Guidance documents that describe how to search electronic records, including Permits by Rule (PBRs) or NSR permits incorporated by reference into an FOP, archived in the Central File Room server are available at https://www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

All current PBRs are contained in Chapter 106 and can be viewed at the following website:

https://www.tceq.texas.gov/permitting/air/permitbyrule/air_pbr_index.html

Previous versions of 30 TAC Chapter 106 PBRs may be viewed at the following website:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html

Historical Standard Exemption lists may be viewed at the following website:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html

Additional information concerning PBRs is available on the TCEQ website:

https://www.tceq.texas.gov/permitting/air/nav/air_pbr.html

Compliance Review

1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on 06/18/2019.
   Site rating: 4.80 / Satisfactory Company rating: 2.85 / Satisfactory
   (High < 0.10; Satisfactory ≥ 0.10 and ≤ 55; Unsatisfactory > 55)
2. Has the permit changed on the basis of the compliance history or site/company rating? ..... No

Site/Permit Area Compliance Status Review

1. Were there any out-of-compliance units listed on Form OP-ACPS? ..... No
2. Is a compliance plan and schedule included in the permit? ..... No

Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes
OP-UA3 - Storage Tank/Vessel Attributes
OP-UA4 - Loading/Unloading Operations Attributes
OP-UA5 - Process Heater/Furnace Attributes
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes
OP-UA7 - Flare Attributes
OP-UA8 - Coal Preparation Plant Attributes
OP-UA9 - Nonmetallic Mineral Process Plant Attributes
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes
OP-UA11 - Stationary Turbine Attributes
OP-UA12 - Fugitive Emission Unit Attributes
OP-UA13 - Industrial Process Cooling Tower Attributes
OP-UA14 - Water Separator Attributes
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
OP-UA16 - Solvent Degreasing Machine Attributes
OP-UA17 - Distillation Unit Attributes
OP-UA18 - Surface Coating Operations Attributes
OP-UA19 - Wastewater Unit Attributes
OP-UA20 - Asphalt Operations Attributes

OP-UA21 - Grain Elevator Attributes
OP-UA22 - Printing Attributes
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes
OP-UA25 - Synthetic Fiber Production Attributes
OP-UA26 - Electroplating and Anodizing Unit Attributes
OP-UA27 - Nitric Acid Manufacturing Attributes
OP-UA28 - Polymer Manufacturing Attributes
OP-UA29 - Glass Manufacturing Unit Attributes
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes
OP-UA31 - Lead Smelting Attributes
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes
OP-UA33 - Metallic Mineral Processing Plant Attributes
OP-UA34 - Pharmaceutical Manufacturing
OP-UA35 - Incinerator Attributes
OP-UA36 - Steel Plant Unit Attributes
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes
OP-UA39 - Sterilization Source Attributes
OP-UA40 - Ferroalloy Production Facility Attributes
OP-UA41 - Dry Cleaning Facility Attributes
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes
OP-UA43 - Sulfuric Acid Production Attributes
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes
OP-UA45 - Surface Impoundment Attributes
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes
OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes
OP-UA49 - Vacuum-Producing System Attributes
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes
OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/Depainting Operation Attributes
OP-UA58 - Treatment Process Attributes
OP-UA59 - Coke By-Product Recovery Plant Attributes
OP-UA60 - Chemical Manufacturing Process Unit Attributes
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes
OP-UA62 - Glycol Dehydration Unit Attributes
OP-UA63 - Vegetable Oil Production Attributes